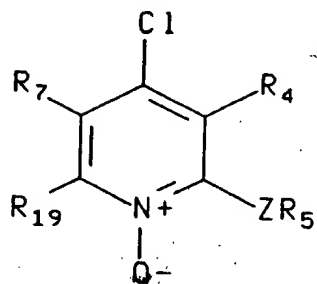


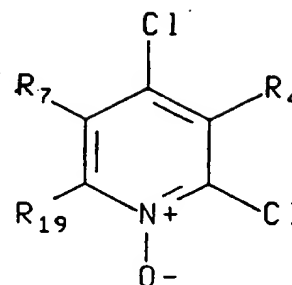
## IN THE CLAIMS

Claim 1 (previously presented) A compound of the formula

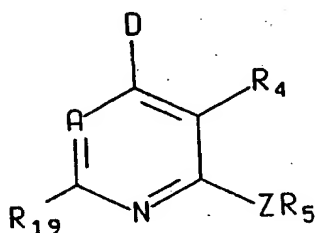


X

OR



XI



IV

wherein  $R_7$  is hydrogen, methyl, fluoro, chloro, bromo, iodo, cyano, hydroxy, - $O(C_1-C_4 \text{ alkyl})$ , - $C(O)(C_1-C_4 \text{ alkyl})$ , - $C(O)O(C_1-C_4 \text{ alkyl})$ , - $OCF_3$ ,  $CF_3$ , - $CH_2OH$ , - $CH_2OCH_3$  or - $CH_2OCH_2CH_3$ ;

$D$  is chloro, hydroxy or cyano;

$R_{19}$  is methyl or ethyl;

$R_5$  is phenyl or pyridyl and  $R_5$  is substituted by two or three substituents independently selected from  $C_1-C_4$  alkyl, chloro and bromo, except that no more than one such substituent can be bromo;

$R_4$  is hydrogen,  $C_1-C_4$  hydrocarbyl, fluoro, chloro, bromo, iodo,  $C_1-C_4$  alkoxy, trifluoromethoxy, - $CH_2OCH_3$ , - $CH_2OCH_2CH_3$ , - $CH_2CH_2OCH_3$ , - $CH_2OF_3$ ,  $CF_3$ , amino, nitro, - $NH(C_1-C_4 \text{ alkyl})$ , - $N(CH_3)_2$ , - $NHCOCH_3$ , - $NHCONHCH_3$ , - $SO_n(C_1-C_4 \text{ alkyl})$  where  $n$  is 0, 1 or 2, cyano, hydroxy, - $CO(C_1-C_4 \text{ alkyl})$ , - $CHO$ , cyano or - $COO(C_1-C_4 \text{ alkyl})$  wherein said  $C_1-C_4$

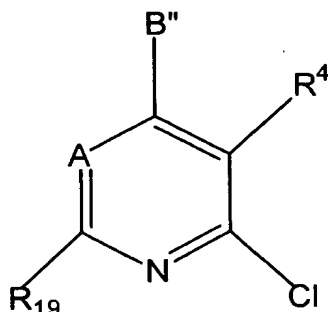
hydrocarbyl may optionally contain one double or triple bond and may optionally be substituted with one substituent selected from hydroxy, amino,  $\text{-NHCOCH}_3$ ,  $\text{-NH(C}_1\text{-C}_2\text{ alkyl)}$ ,  $\text{-N(C}_1\text{-C}_2\text{ alkyl)}_2$ ,  $\text{-COO(C}_1\text{-C}_4\text{ alkyl)}$ ,  $\text{-CO(C}_1\text{-C}_4\text{ alkyl)}$ ,  $\text{C}_1\text{-C}_3$  alkoxy,  $\text{C}_1\text{-C}_3$  thioalkyl, fluoro, chloro, cyano and nitro;

A is N, CH or  $\text{CCH}_3$ ;

and Z is O, NH,  $\text{N(CH}_3\text{)}$ , S or  $\text{CH}_2$ , with the proviso that when A is CH or  $\text{CCH}_3$ , then Z must be O or S.

Claim 2 (currently amended) A compound according to claim 1 having the formula XI wherein  $\text{R}_7$  is hydrogen or methyl and  $\text{R}_4$  is hydrogen,  $\text{C}_1\text{-C}_4$  alkyl,  $\text{C}_1\text{-C}_4$  hydrocarbyl,  $\text{-O(C}_1\text{-C}_4\text{ alkyl)}$ , chloro or cyano.

Claim 3 (currently amended) A compound of the formula



wherein  $\text{R}_{19}$  is methyl or ethyl;

$\text{R}_4$  is hydrogen,  $\text{C}_1\text{-C}_4$  hydrocarbyl, fluoro, chloro, bromo, iodo,  $\text{C}_1\text{-C}_4$  alkoxy, trifluoromethoxy,  $\text{-CH}_2\text{OCH}_3$ ,  $\text{-CH}_2\text{OCH}_2\text{CH}_3$ ,  $\text{-CH}_2\text{OF}_3$ ,  $\text{CF}_3$ , amino, nitro,  $\text{-NH(C}_1\text{-C}_4\text{ alkyl)}$ ,  $\text{-N(CH}_3\text{)}_2$ ,  $\text{-NHCOCH}_3$ ,  $\text{-NHCONHCH}_3$ ,  $\text{-SO}_n(\text{C}_1\text{-C}_4\text{ alkyl})$  where n is 0, 1 or 2, cyano, hydroxy,  $\text{-CO(C}_1\text{-C}_4\text{ alkyl)}$ ,  $\text{-CHO}$ , cyano or  $\text{-COO(C}_1\text{-C}_4\text{ alkyl)}$  wherein said  $\text{C}_1\text{-C}_4$  hydrocarbyl may optionally contain one double or triple bond and may optionally be substituted with one substituent selected from hydroxy, amino,  $\text{-NHCOCH}_3$ ,  $\text{-NH(C}_1\text{-C}_2\text{ alkyl)}$ ,  $\text{-N(C}_1\text{-C}_2\text{ alkyl)}_2$ ,  $\text{-COO(C}_1\text{-C}_4\text{ alkyl)}$ ,  $\text{-CO(C}_1\text{-C}_4\text{ alkyl)}$ ,  $\text{C}_1\text{-C}_3$  alkoxy,  $\text{C}_1\text{-C}_3$  thioalkyl, fluoro, chloro, cyano and nitro;

A is N, CH or  $\text{CCH}_3$

$\text{B}''$  is  $\text{-NR}_1\text{R}_2$ ,  $\text{-CR}_1\text{R}_2\text{R}_{11}$ ,  $\text{-C(=CR}_2\text{R}_{12})\text{R}_1$ ,  $\text{-NHCHR}_1\text{R}_2$ ,  $\text{-OCHR}_1\text{R}_2$ ,

$-\text{SCHR}_1\text{R}_2$ ,  $-\text{CHR}_2\text{OR}_{12}$ ,  $-\text{CHR}_2\text{SR}_{12}$ ,  $-\text{C}(\text{S})\text{R}_2$  or  $-\text{C}(\text{O})\text{R}_2$  or cyano;

wherein  $\text{R}_1$  is  $\text{C}(\text{O})\text{H}$ ,  $\text{C}(\text{O})(\text{C}_1\text{-C}_6 \text{ alkyl})$ ,  $\text{C}(\text{O})(\text{C}_1\text{-C}_6 \text{ alkylene})(\text{C}_3\text{-C}_8 \text{ cycloalkyl})$ ,  $\text{C}(\text{O})(\text{C}_3\text{-C}_8 \text{ cycloalkylene})(\text{C}_3\text{-C}_8 \text{ cycloalkyl})$ ,  $\text{C}(\text{O})(\text{C}_1\text{-C}_6 \text{ alkylene})(\text{C}_4\text{-C}_8 \text{ heterocycloalkyl})$ ,  $-\text{C}(\text{O})(\text{C}_3\text{-C}_8 \text{ cycloalkylene})(\text{C}_4\text{-C}_8 \text{ heterocycloalkyl})$ ,  $\text{C}_1\text{-C}_6 \text{ alkyl}$ ,  $\text{C}_3\text{-C}_8 \text{ cycloalkyl}$ ,  $\text{C}_4\text{-C}_8 \text{ heterocycloalkyl}$ ,  $-(\text{C}_1\text{-C}_6 \text{ alkylene})(\text{C}_3\text{-C}_8 \text{ cycloalkyl})$ ,  $-(\text{C}_3\text{-C}_8 \text{ cycloalkylene})(\text{C}_3\text{-C}_8 \text{ cycloalkyl})$ ,  $-(\text{C}_1\text{-C}_6 \text{ alkylene})(\text{C}_4\text{-C}_8 \text{ heterocycloalkyl})$ ,  $-(\text{C}_3\text{-C}_8 \text{ cycloalkylene})(\text{C}_4\text{-C}_8 \text{ heterocycloalkyl})$ , or  $-\text{O-aryl}$ , or  $-\text{O}-(\text{C}_1\text{-C}_6 \text{ alkylene})\text{-aryl}$ ; wherein said aryl,  $\text{C}_4\text{-C}_8 \text{ heterocycloalkyl}$ ,  $\text{C}_1\text{-C}_6 \text{ alkyl}$ ,  $\text{C}_3\text{-C}_8 \text{ cycloalkyl}$ ,  $\text{C}_3\text{-C}_8 \text{ cycloalkylene}$ , and  $\text{C}_1\text{-C}_6 \text{ alkylene}$  groups may each independently be optionally substituted with from one to six fluoro and may each independently be optionally substituted with one or two substituents  $\text{R}_8$  independently selected from the group consisting of  $\text{C}_1\text{-C}_4 \text{ alkyl}$ ,  $-\text{C}_3\text{-C}_8 \text{ cycloalkyl}$ , hydroxy, fluoro, chloro, bromo, iodo,  $\text{CF}_3$ ,  $-\text{O}-(\text{C}_1\text{-C}_6 \text{ alkyl})$ ,  $-\text{O}-(\text{C}_3\text{-C}_5 \text{ cycloalkyl})$ ,  $-\text{O-CO}-(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{O-CO-NH}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{O-CO-N}(\text{R}_{24})(\text{R}_{25})$ ,  $-\text{N}(\text{R}_{24})(\text{R}_{25})$ ,  $-\text{S}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{S}(\text{C}_3\text{-C}_5 \text{ cycloalkyl})$ ,  $-\text{N}(\text{C}_1\text{-C}_4 \text{ alkyl})\text{CO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{NHCO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{COO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{CONH}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{CON}(\text{C}_1\text{-C}_4 \text{ alkyl})(\text{C}_1\text{-C}_2 \text{ alkyl})$ ,  $\text{CN}$ ,  $\text{NO}_2$ ,  $-\text{OSO}_2(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $\text{S}^+(\text{C}_1\text{-C}_6 \text{ alkyl})(\text{C}_1\text{-C}_2 \text{ alkyl})\text{I}^-$ ,  $-\text{SO}(\text{C}_1\text{-C}_4 \text{ alkyl})$  and  $-\text{SO}_2(\text{C}_1\text{-C}_4 \text{ alkyl})$ ; and wherein the  $\text{C}_1\text{-C}_6 \text{ alkyl}$ ,  $\text{C}_1\text{-C}_6 \text{ alkylene}$ ,  $\text{C}_3\text{-C}_8 \text{ cycloalkyl}$ ,  $\text{C}_3\text{-C}_8 \text{ cycloalkylene}$ , and  $\text{C}_3\text{-C}_8 \text{ heterocycloalkyl}$  moieties of  $\text{R}_1$  may optionally independently contain from one to three double or triple bonds; and wherein the  $\text{C}_1\text{-C}_4 \text{ alkyl}$  moieties and the  $\text{C}_1\text{-C}_6 \text{ alkyl}$  moieties of  $\text{R}_8$  can optionally independently be substituted with hydroxy,  $\text{C}_1\text{-C}_4 \text{ alkyl}$ , amino, aryl,  $-\text{CH}_2\text{-aryl}$ ,  $-\text{C}_3\text{-C}_5 \text{ cycloalkyl}$ , or  $-\text{O}-(\text{C}_1\text{-C}_4 \text{ alkyl})$ , and can optionally independently be substituted with from one to five fluoro, and can optionally contain one or two double or triple bonds; and wherein each heterocycloalkyl group of  $\text{R}_1$  contains from one to three heteromoieties selected from oxygen,  $\text{S}(\text{O})_m$ , nitrogen, and  $\text{NR}_{12}$ ;

wherein  $\text{R}_2$  is hydrogen,  $\text{C}_1\text{-C}_{12} \text{ alkyl}$ ,  $\text{C}_3\text{-C}_8 \text{ cycloalkyl}$ ,  $\text{C}_4\text{-C}_8 \text{ heterocycloalkyl}$ ,  $-(\text{C}_1\text{-C}_6 \text{ alkylene})(\text{C}_3\text{-C}_8 \text{ cycloalkyl})$ ,  $-(\text{C}_3\text{-C}_8 \text{ cycloalkylene})(\text{C}_3\text{-C}_8 \text{ cycloalkyl})$ ,  $-(\text{C}_1\text{-C}_6 \text{ alkylene})(\text{C}_4\text{-C}_8 \text{ heterocycloalkyl})$ ,  $-(\text{C}_3\text{-C}_8 \text{ cycloalkylene})(\text{C}_4\text{-C}_8 \text{ heterocycloalkyl})$ , aryl,  $-(\text{C}_1\text{-C}_6 \text{ alkylene})\text{aryl}$ , or  $-(\text{C}_3\text{-C}_8 \text{ cycloalkylene})(\text{aryl})$ ; wherein each of the foregoing  $\text{R}_2$  groups may optionally be substituted with from one to three substituents independently selected from chloro, fluoro, and  $\text{C}_1\text{-C}_6 \text{ alkyl}$ , wherein one of said one to three substituents can further be selected from bromo, iodo,  $\text{C}_1\text{-C}_6 \text{ alkoxy}$ ,  $-\text{OH}$ ,  $-\text{O-CO}-(\text{C}_1\text{-C}_6 \text{ alkyl})$ ,  $-\text{O-CO-N}(\text{C}_1\text{-C}_4 \text{ alkyl})(\text{C}_1\text{-C}_2 \text{ alkyl})$ ,  $-\text{S}(\text{C}_1\text{-C}_6 \text{ alkyl})$ ,  $-\text{S}(\text{O})(\text{C}_1\text{-C}_6 \text{ alkyl})$ ,  $-\text{S}(\text{O})_2(\text{C}_1\text{-C}_6 \text{ alkyl})$ ,  $\text{S}^+(\text{C}_1\text{-C}_6 \text{ alkyl})(\text{C}_1\text{-C}_2 \text{ alkyl})\text{I}^-$ ,  $\text{CN}$ , and  $\text{NO}_2$ ; and wherein the  $\text{C}_1\text{-C}_{12} \text{ alkyl}$ ,  $-(\text{C}_1\text{-C}_6 \text{ alkylene})$ ,  $-(\text{C}_3\text{-C}_8 \text{ cycloalkyl})$ ,  $-(\text{C}_3\text{-C}_8 \text{ cycloalkylene})$ , and  $-(\text{C}_3\text{-C}_8 \text{ heterocycloalkyl})$  moieties of  $\text{R}_2$  may optionally independently contain from one to three double or triple bonds; and wherein each heterocycloalkyl group of  $\text{R}_2$  contains from one to three heteromoieties selected from oxygen,  $\text{S}(\text{O})_m$ , nitrogen, and  $\text{NR}_{12}$ ;

or where  $R_1$  and  $R_2$  are as in  $-\text{NHCHR}_1\text{R}_2$ ,  $-\text{OCHR}_1\text{R}_2$ ,  $-\text{SCHR}_1\text{R}_2$ ,  $-\text{CHR}_1\text{R}_2$  or  $-\text{NR}_1\text{R}_2$ ,  $R_1$  and  $R_2$  of B may form a saturated 5- to 8-membered ring which may optionally contain one or two double bonds and in which one or two of the ring carbons may optionally be replaced by an oxygen,  $\text{S}(\text{O})_m$ , nitrogen or  $\text{NR}_{12}$ ; and which carbocyclic ring can optionally be substituted with from 1 to 3 substituents selected from the group consisting of hydroxy,  $\text{C}_1$ - $\text{C}_4$  alkyl, fluoro, chloro, bromo, iodo,  $\text{CF}_3$ ,  $-\text{O}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{O-CO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{O-CO-NH}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{O-CO-N}(\text{C}_1\text{-C}_4 \text{ alkyl})(\text{C}_1\text{-C}_2 \text{ alkyl})$ ,  $-\text{NH}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{N}(\text{C}_1\text{-C}_2 \text{ alkyl})(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{S}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{N}(\text{C}_1\text{-C}_4 \text{ alkyl})\text{CO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{NHCO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{COO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{CONH}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{CON}(\text{C}_1\text{-C}_4 \text{ alkyl})(\text{C}_1\text{-C}_2 \text{ alkyl})$ ,  $\text{CN}$ ,  $\text{NO}_2$ ,  $-\text{OSO}_2(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{SO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ , and  $-\text{SO}_2(\text{C}_1\text{-C}_4 \text{ alkyl})$ , wherein one of said one to three substituents can further be selected from phenyl;

wherein  $R_{11}$  is hydrogen, hydroxy, fluoro, ethoxy, or methoxy;

wherein  $R_{12}$  is hydrogen or  $\text{C}_1$ - $\text{C}_4$  alkyl;

with the proviso that when A is N then B'' and  $R_4$  are defined, respectively, as

B'' and  $R_4$  are defined above and when A is CH or  $\text{CCH}_3$ , then B'' is  $-\text{NR}_1\text{R}_2$ ,  $-\text{NHR}_1\text{R}_2$ ,  $-\text{NHCHR}_1\text{R}_2$ ,  $-\text{OCHR}_1\text{R}_2$  or cyano and  $R_4$  is an electron deficient group.

Claim 4 (currently amended) A compound according to claim 3, wherein B'' is  $-\text{NR}_1\text{R}_2$ ,  $-\text{NHR}_1\text{R}_2$ ,  $-\text{NHCHR}_1\text{R}_2$ , and A is CH or  $\text{CCH}_3$ .

Claims 5-8 (cancelled)

Claim 9 (previously presented) A compound according to claim 3 wherein the electron deficient group is selected from the group consisting of  $\text{NO}_2$ ,  $-\text{COO}(\text{C}_1\text{-C}_4 \text{ alkyl})$ ,  $-\text{C}(=\text{O})\text{CH}_3$ ,  $-\text{COOH}$  and cyano.

Claim 10 (previously presented) 4-Chloro-2-(4-chloro-2,6-dimethyl-phenoxy)-3,6-dimethyl-pyridine.